# TRAINING TOPICS IN ARTIFACT PRESERVATION

The following is a list of preservation training topics for cultural resource specialists. The curriculum is designed specifically for park staff and SSO / regional curators responsible for collections care. The curriculum is offered by the conservators at HFC and can be presented as stand-alone training sessions or incorporated into workshops or courses given at Harper Ferry or field locations

# **General Preservation Issues**

- 1. Conservation, Getting Started
- 2. Finding, Selecting and Contracting for Conservation Services
- 3. The Agents of Deterioration
- 4. Managing the "Threats" to Museum Artifacts
- 5. Preventive Conservation, A Systematic Approach
- 6. Use of Environmental Monitoring Equipment
- 7. Integrated Pest Management for Collections
- 8. Microorganism Attack and Collections
- 9. Photographing (Imaging) Museum Objects
- 10. Scientific Analysis of Cultural Materials
- 11. Curatorial Safety (part I)
- 12. NAGRPA Issues and Contaminated Collections (Curatorial Safety Part II)

# Preservation of Collections on Exhibit & in Storage

- 1. Conservation Assessment of Buildings, Exhibits & Storage
- 2. Managing Collections in Historic Structure Museums
- 3. Preventive Care for Historic House Museums
- 4. Developing a New Exhibit How to Incorporate Conservation
- 5. Advances in Exhibitions Conservation
- 6. Successful Exhibition Lighting
- 7. Build a Better Custom Box
- 8. Moving Your Collection
- 9. Packing Artifacts for Shipment

# **Curatorial Care & Conservation of Specific Collections**

- 1. Condition Assessment, Care & Conservation of Archaeological & Metal Objects
- 2. Introduction to the Preservation of Outdoor Bronze
- 3. Preservation of Wooden Objects Exhibited in an Outdoor Environment
- 4. Preventive Conservation for Furniture and Wooden Objects
- 5. Condition Assessment, Care & Conservation of Ethnographic Objects
- 6. Preserving Objects made from Leather and Skin Products
- 7. Print Identification, Care & Handling
- 8. Archival paper Materials Care, Storage and Handling
- 9. Historic Photographic Processes Identification, Handling and Storage
- 10. Modern Photographic Processes- Identification, Handling and Storage
- 11. The Curatorial Care of Textiles

# TRAINING TOPICS IN PRESERVATION: SESSIONS DESCRIPTIONS Harpers Ferry Cenber

*The following training descriptions are intended to serve only as an overview of the topics offered:* 

# **Training Category A: General Preservation Issues**

#### **A1**

Title: Conservation, Getting Started:

Instructor: Martin Burke Hours of Instruction: 2-4 hours Format: lecture, slides, practicum

#### **A2**

Title: Finding, Selecting, and Contracting for Conservation Services

Instructor: Martin Burke Hours of Instruction: 2-4 hours Format: lecture, slides, practicum

Course Objectives:

- 1. to distinguish between preservation and restoration treatments
- 2. to discuss how the code of ethics and standards of practice guides conservators
- 3. how to find and select a conservator
- 4. how to develop a scope of work for surveys and treatments

# **A3**

Title: How to Do a Whole Lot with Little or No Resources

Instructor: A. Newton / DOC Staff Hours of Instruction: 2-4 hours Format: lecture, demonstration

Course objective:

- 1. Each DOC staff member presents **INEXPENSIVE** techniques or tools that can make an impact on the care of park collections (10-15 minutes each)
- 2. Resource list is presented for each class member to take home

#### **A4**

Title: Agents of Deterioration Instructor: Al Levitan / DOC staff Hours of Instruction: 2-4 hours Format: lecture, slides, video

Course Objectives:

- 1. Identify the environmental threats to the long term preservation of museum artifacts
- 2. Discuss why a stable environment is essential to the long term preservation of artifacts
- 3. Define what is meant by a "holistic approach" to managing the museum environment

#### **A5**

Title: Managing the "Threats" to Museum Artifacts

Instructor: Al Levitan

Hours of Instruction: 2 hours Format: lecture, slides, video

- 1. Discuss the steps in establishing a program to monitor the environment of museum artifacts
- 2. Identify the types of equipment used to monitor the environment
- 3. Discuss some of the methods used to mitigate environmental threats to museum artifacts

# **A6**

Title: Preventive Conservtion – a Systematic Approach

Instructor: Toby Raphael Hours of Instruction: 2–4 hours

Format: lecture, slides, demonstration, exercise

Course Objectives:

- 1. Presernt the foundations of the preventive conservation approach including international models
- 2. Demonstrate the use of the Preservation Wall Chart
- 3. Identify how to evaluate whether "macro" or "micro" solutions are most appropriate

# **A7**

Title: Use of Environmental Monitoring Equipment

Instructor: Dan Riss, A. Levitan Hours of Instruction: 2-4 hours

Format: Lecture, slides, video, demonstration, computer program & equipment demonstration

Course Objectives:

- 1. Describe the use and limitations of light meters, hygrometers, hygrothermographs, and data loggers in monitoring museum environment.
- 2. Conduct and interpret measurements with the equipment including use of data logger computer software.
- 3. Demonstrate hygrothermograph maintenance procedures
- 4. Interpret environmental data and identify conditions adverse to object preservation

#### **A8**

Title: Integrated Pest Management for Collections

Instructor: B. Cumberland

Hours of Instruction: 2, 4 or 8 hours

Format: Lecture, slides, video, demonstration

Course Objectives:

- 1. Identify the symptoms and causes of biological attack
- 2. Identify the primary collection materials at risk
- 3. Identify the preventive steps to create safer collection environments
- 4. Identify the interventive steps that can be taken when required

#### **A9**

Title: Microorganism Attack and Collections Instructor: B. Cumberland / T. Shockey Hours of Instruction: 2, 4 or 8 hours

Format: Lecture, slides, video, demonstration

Course Objectives:

- 1. Identify the symptoms and causes of biological attack
- 2. Identify the primary collection materials at risk
- 3. Identify the preventive steps to create safer collection environments
- 4. Identify the interventive steps that can be taken when required

# A10

Title: Photography of Museum Objects Workshop

Instructor: Dan Riss

Hours of Instruction: 4 to 8 hours

Format: Lecture, slides, video, practicum with digital feedback

Course Objectives:

- 1. Discuss the elements of a good museum record photograph.
- 2. Demonstrate adequate lighting technique by actual arrangement of lights in a set-up.
- 3. Make a photo showing-off the important characteristics of an object.

# A11

Title: Scientific Analysis of Cultural Materials

Instructor: Dr. Judy Bischoff Hours of Instruction: 1 week

Format: Lecture, PowerPoint, Practicum

Course Objectives:

- 1. To discuss various roles of scientists in the study of cultural materials
- 2. How to design questions that will help scientists arrive at desired answers
- 3. To understand the purpose of scientific investigation or analysis
- 4. To have a basic understanding of advantages and disadvantages of analysis
- 5. To learn about sampling issues
- 6. Introduction of "low-" and "high-tech" analytical tools
- 7. How to find and select scientists or labs when analysis is required

# A12

Title: Curatorial Safety (Part 1) Instructor: Dr. Judy Bischoff Hours of Instruction: 1 week

Format: Lecture, PowerPoint, Practicum

Course Objectives:

- 1. To provide information on OSHA and other federal regulations pertaining to curatorial practice
- 2. To identify hazards that curators must deal with
- 3. To create a draft of a chemical safety (hygiene) plan
- 4. How to select and properly use personal protective equipment
- 5. How to label and store hazardous materials
- 6. How to acquire and interpret Material Safety Data Sheets

#### A13

Title: NAGPRA Issues and Contaminated Collections: Preservation, Access and Use (Part 2)

Instructors: Dr. Judy Bischoff, Virginia Salazar, Catharine Hawks, Kathryn Makos, John Robbins and Ron Wilson (I haven't confirmed anyone, but these folks would be KEY speakers or instructors)

Hours of Instruction: 1 week

Format: Lecture, PowerPoint, Practicum

- 1. To discuss legal and ethical issues related to repatriation
- 2. To discuss tribal issues related to repatriation
- 3. To learn about appropriate handling procedures for contaminated collections
- 4. To discuss hazards and risks associated with contaminated collections
- 5. To discuss testing for contamination
- 6. To discuss monitoring for hazardous exposure

# Training Category B: Preservation of Collections on Exhibits & in Storage

#### **B1**

Title: Conservation Assessment of Buildings and Exhibit / Storage Areas

Instructor: Dan Riss / Jane Merritt / Toby Raphael

Hours of Instruction: 2 –4 hours (6 with addition of on-site inspection)

Format: Lecture, slides, video; on-site inspection, if available.

Course Objectives:

- 1. Identify the major threats to museum collections on exhibit or in storage.
- 2. Describe the interaction between the environment, buildings, and collections.
- 3. Discuss several ways to mitigate collection threats.

#### **B2**

Title: Managing Museum Collections in Historic Structure Museums

Instructor: Al Levitan

Hours of Instruction: 2-4 hours

Format: lecture, slides, discussion, assessment/observation of conditions in a historic house

Course Objectives:

1. Identify the threats to museum collections housed in historic structure museums

2.develop an environmental control strategy which balances the preservation needs of the structure with that of the collection

3. discuss some of the methods successfully used to mitigate the preservation threats to collections housed in historic structure museums

# **B3**

Title: Preventive Care for Historic House Museums

Instructor: Jane Merritt

Hours of Instruction: 12 to 18 hours

Format: Lecture, Hands-on demonstration sessions, Site Housekeeping Assessment, Video

Course Objectives:

- 1. Improve care for historic house collections through a basic understanding of objects and their materials, cleaning requirements, and by establishing a monitoring schedule.
- 2. Identify and discuss site specific issues regarding preventive care routines
- 3. Demonstrate the balance between object preservation and the use of objects in context, and highlight the positive and negative impact of housekeeping routines.

# **B4**

Title: Developing a New Exhibit – How to Incorporate Conservation

Instructor: Toby Raphael Hours of Instruction: 2-4 hours

Format: Lecture, slides, video, exercises

Course Objectives:

- 1. To involve park and regional staff more effectively to protect collections during exhibit planning, design and production
- 2. To identify the key conservation features and resources that are available
- 3. To insure quality control and acceptable performance of conservation features in new exhibits

# **B5**

Title: Advances in Exhibitions Conservation

Instructor: Toby Raphael

Hours of Instruction: 2,4 or 8 hours Format: Lecture, slides, video, exercises

# Course Objectives:

- 1. To identify current conservation techniques/technology that are useful in developing safe exhibits
- 2. To describe diverse applications for environmental control
- 3. To identify the universe of conservation options in exhibit case design and fabrication

#### **B6**

Title: Design and Fabrication of Artifact Supports and Mounts

Instructor: Toby Raphael

Hours of Instruction: 2, 4 or 8 hours Format: Lecture, slides, video, exercises

Course Objectives:

- 1. To identify the fundamental criteria for the design and fabrication of mounts and storage supports
- 2. To identify conservation-grade materials available
- 3. To produce a set of custom mounts as examples

# **B7**

Title: Successful Exhibition Lighting for Conservation

Instructor: Larry Bowers / Toby Raphael Hours of Instruction: 2, 4 or 8 hours Format: Lecture, slides, video, exercises

Course Objectives:

- 1. Identify the requirements for an exhibit lighting plan 2. Appropriate light sources
- 2. Build an understanding of the different lighting sources available and their advantages/disadvantages
- 3. Learn how to select lighting fixtures and lamps to meet conservation requirments.

# **B8**

Title: Storage Room Equipment and Organization

Instructor: Alice Newton Hours of Instruction: 2-4 hours

Format: Lecture, slides Course objective:

- 1. Define the preventative conservation needs for general artifact collection storage
- 2. Identify equipment available for use in artifact storage areas
- 3. Discuss options for setting up a storage facility

# **B9**

Title: Preventative Conservation Techniques for Artifact Storage

Instructor: Alice Newton/Karen Matson

Hours of Instruction: 2-4 hours

Format: Lecture, slides, hands-on participation

Course objective:

- 1. Identify the agents of deterioration that can affect the collection during storage
- 2. Discuss materials and techniques used in artifact storage
- 3. Define specific needs and handling criteria for a variety of media
- 4. Prepare artifacts for storage and discuss their specific needs

#### **B10**

Title: Build a Better Custom Box

Instructor: Alice Newton Hours of Instruction: 2-4 hours

Format: Lecture, demonstration, hands on participation

- 1. Identify materials to be used for the fabrication of custom storage boxes
- 2. Demystify the math behind the box
- 3. Create a custom sized box for an artifact

#### **B11**

Title: Moving Your Collection Instructor: Alice Newton

Hours of Instruction: 8 hours to 1 week

Format: Lecture, slides, demonstration, hands on participation

Course objective:

1. How to plan your collection move

- 2. How to prepare your collection for a major move
- 3. Discuss the options for the movement of a collection
- 4. Moving the collection

(This can be oriented to either planning or implementation of a major collection move)

#### **B12**

Title: Packing Artifacts for Shipment (Part I) Instructor: Alice Newton/Karen Matson

Hours of Instruction: 4 hours

Format: Lecture, discussion, demonstration, hands on participation

Course objective:

- 1. Develop basic knowledge of shipping materials and techniques
- 2. Evaluate artifacts to determine the most appropriate packing and shipping technique to use
- 3. Pack small, stable, flat and three-dimension artifacts for transport

#### **B13**

Title: Packing Artifacts for Shipment (Part II) Instructor: Alice Newton/Karen Matson

Hours of Instruction: 8 hours

Format: Discussion, demonstration, hands on participation

Course objective:

- 1. Take basic packing one step further
- 2. Develop criteria for using a variety of packing methods
- 3. Pack for the transport method
- 4. Hands-on packing for shipping

# **B14**

Title: How to Get It From Here to There (or Choices for Shipping Artifacts)

Instructor: Alice Newton Hours of Instruction: 2 hours Format: Lecture, slides Course objective:

- 1. Identify artifact shipping options
- 2. Identify how to choose appropriate shipping options
- 3. Discuss steps needed to complete a successful shipment
- 4. Provide methods for dealing with shippers

# **Training Category C: Curatorial Care & Conservation of Specific Collections**

# **C**1

Title: Condition Assessment of Archeological and Metal Collections

Instructor: Dan Riss

Hours of Instruction: 2 –4 hours (1 to 5 days to conduct an assessment)

Format: Lecture, slides, video, on-site inspection.

Course Objectives:

- 1. Identify the materials of construction of archeological and metals collections.
- 2. Describe the major threats to these collections and the signs of deterioration.
- 3. Assign mitigation priorities appropriate to object condition and storage location.

# **C2**

Title: Introduction to the Preservation of Outdoor Bronze

Instructor: Dan Riss Hours of Instruction: 2 Format: Lecture, slides, video.

Course Objectives:

- 1. Recognize the various construction materials of monuments and markers in parks...
- 2. Identify the threats to bronze metal sculpture and placques.
- 3. Discuss several possible mitigation strategies.

# **C3**

Title: Preservation of Wooden Museum Objects Exhibited in an Outdoor Environment

Instructor: Al Levitan

Hours of Instruction: 2-4 hours

Format: lecture slides, assessment/observation of objects if possible

Course Objectives:

- 1. Identify the causes of deterioration of wooden objects housed outdoors
- 2. Describe the tools and methods used to quantify the extent of deterioration
- 3. Describe the materials and techniques used to mitigate deterioration

# **C4**

Title: Preventive Conservation for Furniture and Wooden Artifacts

Instructor: Al Levitan

Hours of Instruction: 2-4 hours

Format: lecture, slides, demonstrations

Course Objectives:

- 1. Discuss the characteristics of wood and how these characteristics effect the behavior of the artifacts
- 2. Identify some of the environmental and inherent causes of deterioration to wooden artifacts
- 3. Identify the environmental conditions and curatorial care conducive to the preservation of furniture and wooden artifacts.

#### **C5**

Title: Workshop on Curatorial Care of Furniture and Wooden Artifacts

Instructor: Al Levitan

Hours of Instruction: 2-4 hours

Format: demonstration, hands on practicum

- 1. Properly dust, clean and wax furniture and wooden objects
- 2. Inspect for and identify insect infestation in furniture and wooden objects
- 3. Practice proper handling and moving procedures for furniture and wooden objects

# **C6**

Title: Condition Assessment. Care and Conservation of Musical Instruments

Instructor: Larry Bowers Hours of Instruction: 2-4 hours

Format: Lecture, demonstration, hands on practicum

Course Objectives:

- 1. Discuss the characteristics of musical instruments and how these characteristics effect conservation
- 2. Identify the environmental and inherent causes of deterioration and how to document their condition
- 3. Methods to properly dust, clean and care for these objects and inspect for and identify insect

# **C7**

Title: Condition Assessment, Care and Conservation of Ethnographic Objects

Instructor: Toby Raphael

Hours of Instruction: 2, 4 or 8 hours

Format: lecture, demonstration, hands on practicum

Course Objectives:

- 1. Discuss the characteristics of ethnographic materials and how these characteristics effect conservation
- 2. Identify the environmental and inherent causes of deterioration to ethnographic artifacts and how to document their condition
- 3. Identify the environmental conditions and curatorial care conducive to preservation including the key storage and exhibit strategies

#### **C8**

Title: Preserving Objects Made from Skin Products

Instructor: Toby Raphael

Hours of Instruction: 2, 4 or 8 hours Format: :Lecture, slides, video, exercises

Course Objectives:

- 1. Understand the manufacturing processes and how they effect object preservation
- 2. Identify the environmental and inherent causes of deterioration to skin products and how to document their condition
- 3. Identify the environmental conditions and curatorial care conducive to preservation including the key storage and exhibit strategies

#### **C**9

Title: Print Identification, Care and Handling

Instructor: Nancy Purinton Hours of instruction: 6 hours

Format:

Course Objectives:

- 1. Participants will understand the processes and be able to identify several historic printmaking processes.
- 2. Participants will know the correct materials and techniques for exhibit and storage care of prints.
- 3. The correct requirements and techniques for handling paper will be known by the participants.

# C10

Title: Archival paper materials care, storage and handling

Instructor: Nancy Purinton Hours of instruction: 6 hours

Format:

- 1. Participants will understand the structure of a variety of archival paper materials.
- 2. Participants will know the proper handling techniques for that variety of archival paper materials.

3. Participants will know the different types of enclosures and housings required for archival paper materials in both storage and exhibition situations.

#### C11

Title: 19<sup>th</sup> C. Historic Photographic Processes – Identification, Handling and Storage

Instructor: Theresa Shockey

Hours of instruction: 2, 4 or 8 hours

Format: Lecture, hands-on demonstrations

- 1. Participants will learn about the development of historic photographic processes and be able to identify several processes.
- 2. The correct requirements and techniques for handling historic photographs will be discussed.
- 3. Participants will gain knowledge about the correct materials and techniques for exhibit and storage of historic photographs.

# C12

Title: Modern Photographic Processes (1920 - Today) - Identification, Handling and Storage

Instructor: Theresa Shockey

Hours of instruction: 2, 4 or 8 hours

Format: Lecture, hands-on demonstrations

- 1. Participants will learn about modern photographic processes with a concentration on black and white prints and be able to identify several processes.
- 2. The correct requirements and techniques for handling modern photographs will be discussed.
- 3. Participants will gain knowledge about the correct materials and techniques for exhibit and storage of modern photographs.

#### C13

Title: The Curatorial Care of Textiles

Instructor: Jane Merritt

Hours of instruction: 2, 4, 12 or 18 hours

Format: Lecture, Hands-on demonstration sessions, Assessment of site storage

- 1. Identify the basic materials and structures of textiles and discuss how and why they deteriorate
- 2. Identify preventive measures that curatorial staff can perform to increase the levels of care for textiles
- 3. Demonstrate proper handling, vacuuming routines and storage techniques